



### Power RF Amplifiers

**Power = 25 Watts**

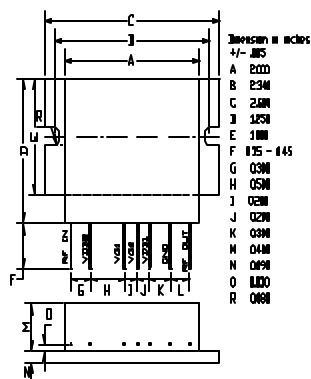
**Bandwidth = 450 to 480 Mhz**

**Gain = 45 dB      Vdd = 28 Volts**

**50 ohms Input/Output Impedance**

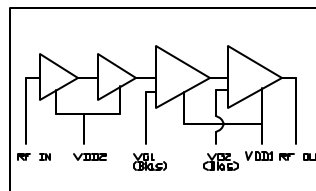
### Description

The PHM004 is a high gain high power amplifier design for the Tetra frequency range. It has four stages and uses the latest Ldmos technology transistors. The amplifier has very high gain and high efficiency and has a IP3 of 55 dBm



### Absolute Maximum Ratings ( T = 25°C )

Parameter	Symbol	Value	Unit
DC supply Voltage 1	VDD1	32	V
DC supply Voltage 2	VDD2	6.5	V
Input Power	Pin	0.005	W
Output Power	Pout	30	W
Operating Case Temp.	Tc	-20 to +70	°C
Storage Temp.	Tstg	-30 to +100	°C



### Electrical Characteristics: ( T = 25°C Zs=Zl=50 ohms. Vdd = 28 Volts )

Parameter	Symbol	Min	Typical	Max	Unit	Test Conditions
Frequency Range	BW	450		480	Mhz	50 ohm load
Output Power	Po	25			Watts	Idq = 0.75 Amps
Power Gain	PG	45			dB	@ Pout = 25 Watts
Total Efficiency	η	40			%	@ Pout = 25 Watts
2nd Harmonics	dso		-55		dBc	@ Pout = 25 W. Freq = 465 Mhz
Intermod - 2 tone	Ip3	55			dBm	Freq = 465 Mhz
Load MismatchTolerance	VSWR	10:1			Relative	All Phase Angles
DC supply Voltage 2	VDD2		5.50	6.5	V	

# PHM004

